



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/806,225

03/23/2004

Hans Ulrich Frutschi

61277-0011

1759

27890

7590

06/14/2006

STEPTOE & JOHNSON LLP
1330 CONNECTICUT AVENUE, N.W.
WASHINGTON, DC 20036

EXAMINER

RODRIGUEZ, WILLIAM H

ART UNIT

PAPER NUMBER

3746

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/806,225

Applicant(s)

FRUTSCHI ET AL.

Examin r

William H. Rodriguez

Art Unit

3746

-- The MAILING DATE of this c mmunication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment and remarks filed 2/28/06.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4 and 6-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the intended use recitations "operated with a **working medium****carbon dioxide**; designed for **air** as the **working medium**" in lines 3 and 11-12. Then, in line 15 of claim 1 an expected/desired result recitation "to accommodate the expansion behavior of **the working medium**" is recited. It is unclear to what working medium this last recitation is referring back to. Is it the working medium for which the compressor/turbine was designed for, air? or Is it the working medium for which applicant wishes the invention to operate with, carbon dioxide?. Appropriate correction is required. This rejection also applies to claims 2 and 3.
4. Claim 1 recites the recitation "size adjustment" in line 17. It is unclear what structural element (i.e., the compressor, turbine, ducts, etc) is being adjusted and what characteristic/parameter of such element is being adjusted (i.e., the height, the width, the thickness, etc). What is being adjusted? and What parameter of this element is being adjusted? Appropriate correction is required.
5. With regards to claims 1-4 and 6-15, the intended use recitation "operated with" has little if any patentable weight since it has been held that the material worked upon by an apparatus

Art Unit: 3746

(the gas mixture in this case) would not define said apparatus over a prior art apparatus satisfying the structural limitation as recited in the claim. Appropriate correction is required.

6. With regards to claims 1-4 and 6-15, the intended use recitation “operated with (1)..., (2)....., and (3)” is very confusing. It is unclear if applicant is stating that he/she wishes to operate the invention with 3 different and independent working mediums (a mixture, hydrocarbon and excess carbon) at the same time or if the first 2 are the possible working mediums and the last is a result of the mixture or something else?. Appropriate correction is required.

7. With regards to claims 10-22, intended use recitation “for use” recites the possible use or purpose of the claimed invention but does not limit or add any patentable weight to the claim. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitations of the claims, as is the case here. Appropriate correction is required.

8. Claim 10 recites the recitation “size modification” in the last line. It is unclear what structural element (i.e., the compressor, turbine, ducts, etc) is being modified and what characteristic/parameter of such element is being adjusted (i.e., the height, the width, the thickness, etc). Appropriate correction is required.

9. Claim 22 recites the recitation “size adjustment” in line 10. It is unclear what structural element (i.e., the compressor, turbine, ducts, etc) is being adjusted and what characteristic/parameter of such element is being adjusted (i.e., the height, the width, the thickness, etc). Appropriate correction is required.

Art Unit: 3746

10. In claim 6, it is unclear how the adjustable guide vanes are deployed to compensate for the thermodynamic properties. How?, Where is that in the specification. Appropriate correction is required.

Basically, the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

A prior art search has been attempted to the Examiner's best understanding of the invention. However, due to the indefiniteness of the claims a full and complete application of the prior art to the claims was not possible. Lack of an art rejection should not be construed as an indication of allowable subject matter.

Note: Examiner suggest completely re-writing or better canceling claims 1-4 and 6-15 because these claims are very confusing and indefinite, one cannot make sense of what is actually being claimed as the invention. Claims 16-21 will be in a better form after deleting the intended use recitation "for use".


Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodríguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


William H. Rodriguez 6/8/06
Primary Examiner
Art Unit 3746